A CASE OF CONGENITAL SUBSPINOUS "DISLOCATION" OF THE HEAD OF THE HUMERUS.[1]

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CONGENITAL displacement or "dislocation" of the humeral head is either uncommon or frequently overlooked. The condition is probably a malformation similar to that which exists in the so-called congenital dislocation of the hip. The subspinous or subacromial variety, to which the present case belongs, is said to be less frequently seen than the subcoracoid, which is the other form of displacement described.

The child was referred to me by Dr. C. H. Mann, of Bridgeport, Pennsylvania, who had delivered the mother at the time the child was born. He remembers nothing particular about the labor, but the mother says it was a difficult one and that instruments were used.

When the baby was three days old the parents noticed that the left arm hung at the side with the palm turned differently from that of the other hand, and that there was "a groove in the skin a little below the shoulder as if the arm had been turned the wrong way." The infant used the fingers to grasp things, as it did those of the other hand, and no diminution of strength was observed. There was no discoloration about the shoulder at the time of birth, and the child gave no special indication of pain at the shoulder when it was handled.

At the present time the patient is an intelligent, well-developed

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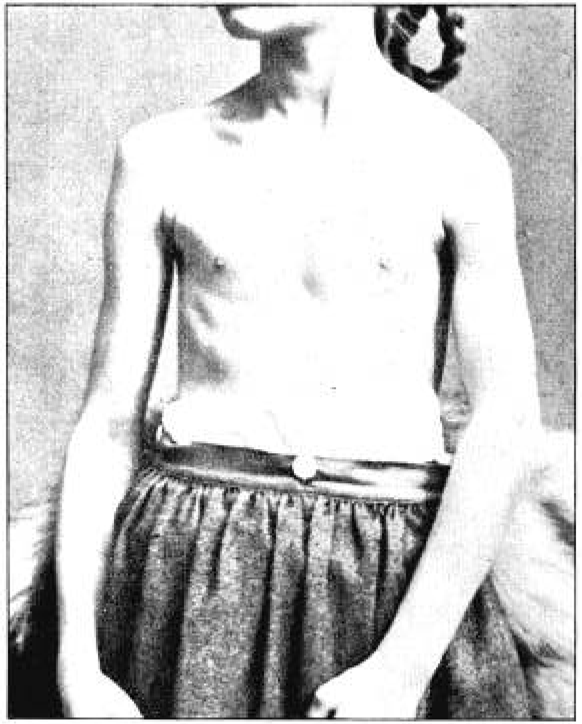
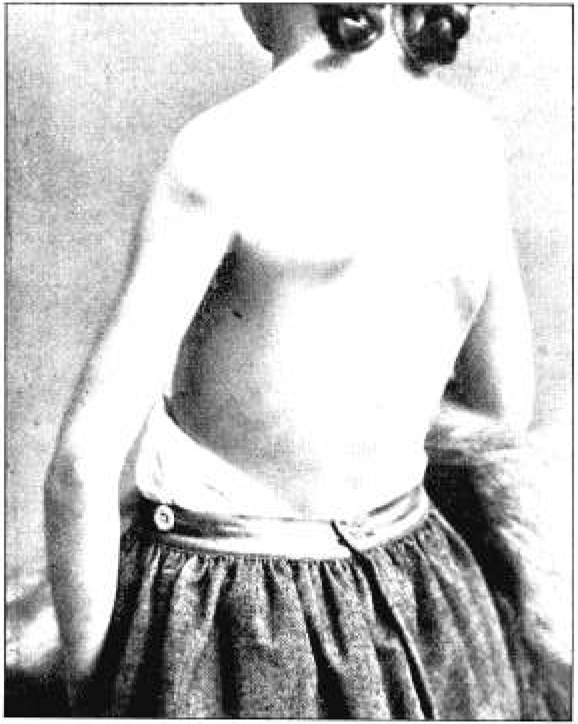
[1] Read by title at the meeting of the American Surgical Association, 1895.



Anterior aspect of the shoulder.



Posterior aspect of the shoulder.

girl of ten years of age, with no other deformity than that of the left shoulder.

As is seen in the cut, taken from a photograph, the head of the left humerus lies beneath the outer portion of the spine of the scapula, causing a very marked prominence. It seems to rest just behind the posterior edge of the glenoid cavity, below the junction of the base of the acromion with the scapular spine. The humerus is abducted, and so greatly rotated inward that the posterior surface of the bone presents outward instead of backward. This rotation causes the back of the elbow to point outward and the articular surface of the head of the humerus to present almost directly backward.

There is a depression on the anterior surface of the chest below the outer end of the clavicle and the tip of the acromion ; the general contour of the upper part of the arm and the shoulder in front is changed. The shoulder is flattened or less square than normal. This is due partly to the changed relations of the bones and partly to muscular atrophy. No deformity exists in the clavicle. Neither the acromion or coracoid process is unduly prominent. In fact, the latter seems less prominent than on the normal side of the body. This does not accord with the case reported by R. W. Smith in which the coracoid process caused a remarkable projection.

The scapula seems to occupy a higher position on the left side than on the right and moves with the humerus, for there is little mobility at the shoulder-joint. The distance from the head of the humerus to the tip of the olecranon seems less in the abnormal than in the normal limb.

When at rest the left arm hangs at her side, farther from the chest than on the right side, and with the forearm in pronation. The child can voluntarily increase the pronation ; but has very little power to supinate. She can flex and extend the elbow freely, but complete extension is impossible. The movements of the wrist and fingers are normal.

When the surgeon rotates the upper arm the moving humeral head gives a grating sensation to a hand placed over it. The movements at the scapulo-humeral articulation are much restricted. The abducted arm can be brought into contact with the chest by pressure, but the child cannot voluntarily bring it into that position. Full extension of the elbow cannot be obtained, but passive pronation and supination of the hand are perfect.

There is muscular atrophy of the arm and some atrophy of the muscles of the forearm. When the child wishes to put the left hand on the right shoulder she has to throw her arm upward with a sudden movement which carries the elbow outward. She is then able to put the tips of her fingers upon the right shoulder. Subsequently, by a sort of creeping motion of the fingers, she succeeds in drawing the hand on top of the shoulder. After thus grasping the shoulder she can bring the humerus, elbow, and forearm into contact with the front of the chest.

She can bring the arm and elbow into contact with the left side of the head, but cannot put that hand on top of the head. If, however, the elbow and forearm are passively raised, so that the humerus becomes more or less horizontal, she can readily place her hand on top of her head. She says that she can arrange her hair, if she first uses her right hand to lift the left arm and hand in a similar manner into the position which allows her to place the left hand on top of the head.

I advised operation, and will, if permitted by the parents, cut down upon the head and excise it or put in contact with the glenoid cavity. Thus far I have been unable to gain their consent to any operative treatment.